

Indiana University Bloomington IUScholarWorks

Citation for this item

Citation format and information for this document is found at:

<http://hdl.handle.net/2022/17501>

This paper is from:

Dr. Ruth C(lifford) Engs - Presentations, Publications & Research Data Collection.

This collection is found at IUScholarWorks: <http://hdl.handle.net/2022/16829>

When in the collection and within a category, click on “title” to see all items in alphabetical order.

The Collection

This document is part of a collection that serves two purposes. First, it is a digital archive for a sampling of unpublished documents, presentations, questionnaires and limited publications resulting from over forty years of research. Second, it is a public archive for data on college student drinking patterns on the national and international level collected for over 20 years. Research topics by Dr. Engs have included the exploration of hypotheses concerning the determinants of behaviors such as student drinking patterns; models that have examine the etiology of cycles of prohibition and temperance movements, origins of western European drinking cultures (attitudes and behaviors concerning alcohol) from antiquity, eugenics, Progressive Era, and other social reform movements with moral overtones-Clean Living Movements; biographies of health and social reformers including Upton Sinclair; and oral histories of elderly monks.

Indiana University Archives

Paper manuscripts and material for Dr. Engs can be found in the IUArchives

http://webapp1.dlib.indiana.edu/findingaids/view?doc.view=entire_text&docId=InU-Ar-VAC0859

LET'S LOOK BEFORE WE LEAP: THE COGNITIVE AND BEHAVIORAL EVALUATION OF A UNIVERSITY ALCOHOL EDUCATION PROGRAM

RUTH C. ENGS, R.N., ED.D.

Assistant Professor Health and Safety Education Indiana University

This pre-print was created in April 2014. Retrieved from: <http://hdl.handle.net/2022/17501>

INTRODUCTION

During the past 100 years there have been a wide variety of alcohol education philosophies and programs. (14) However, most of these programs, have done little to change the drinking habits in our nation. (15) As is commonly known we are a drinking oriented society with alcohol being our "drug of choice for social, religious and self-medicinal purposes. In the aftermath of the "drug epidemic" of the 1960's, alcohol was still found to cause more problems than most of the other drugs combined. Consequently, in the past several years the problem of alcohol abuse has become a popular issue for educators, parents and the community.

When a problem becomes popular and is seen as a crisis situation. "educational programs" are often developed hurriedly by a variety of agencies without being created for specific groups. Many of these programs are then fostered upon students and the public without being thoroughly evaluated as to their effect in changing knowledge, attitudes, and more importantly behaviors. This was particularly true of the drug education programs developed during the late 1960's and early 1970's. (8, 13) Recent evaluations of some of these programs have suggested that at best they increased the participants knowledge about drugs but did not change drug taking behaviors and at worst some actually increased experimental drug usage. (4, 8, 10, 20) Because of the renewed interest in alcohol abuse many alcohol education programs are now being developed by a variety of groups to meet the "alcohol crisis." However, before these programs are presented to large groups of people they should be thoroughly evaluated to determine their effect, particularly upon behaviors associated with drinking.

Keeping this in mind it was decided that before the dissemination of a student alcohol awareness program at Indiana University, a thorough evaluation of the presentation in the form of a pilot study would be undertaken. This university like many other post secondary institutions has been experiencing increased student alcohol abuse resulting in such behaviors as careless driving, destruction of university property, medical injuries and general rowdiness. To cope with this growing problem a task force composed of faculty, staff and students was created to

develop a student alcohol awareness program. After a thorough search of the literature, the task force identified some basic criteria for the development of this presentation. These guidelines include the following:

1. As suggested by Globetti (7) the program should be created specifically for this particular audience rather than based upon some generalized approach and needed to be socially and intellectually acceptable to those students.
2. The program should include the latest philosophies of alcohol education including the NIAAA (15) guidelines which encourages responsible choices concerning alcohol use and responsible drinking in those who choose to drink.
3. Educational methodologists which have been shown to result in behavior change such as programs based upon the Health Belief Model (1) values clarification exercises with cognitive information (16) and motion pictures (18) should be a basic part of the program.
4. In order to reach as many students as possible, the program should be designed so it could be presented by paraprofessionals or "peer counselors."

Using these guidelines the program was designed to be presented in two to three hours to small groups of students in residential units, social club settings or classrooms facilitated by a trained student.

The program begins with an original 13 minute colored film called BOOZE AND YOUs. In this motion picture a W. C. Fields cartoon character presents in a humorous way the history, manufacturing, and cultural use of various alcoholic beverages. This character also clears up common misconceptions and myths about drinking, points out possible consequences or irresponsible drinking behaviors and gives hints for responsible drinking. The remainder of the presentation is devoted to small group discussions using 5 values clarification exercises. These strategies help participants begin to examine their values in relationship to their drinking behaviors, help them begin to define responsible drinking behaviors for themselves and aid them in examining various reasons for which they might be drinking-including peer pressure. After the presentation students are encouraged to discuss with the leader, at any time, problems or concerns about drinking and are given addresses of campus helping agencies including a student A.A. group.

To train the facilitators for the program an eight hour training package was developed. The training includes communication skill sharpeners, basic leadership skills, the purpose of each values clarification exercise and how to process them, community referral sources and additional knowledge about alcohol. Most of the group leaders are residential assistants, student health service peer counselors, crisis intervention center volunteers and other students with some experience in group leadership.

To ascertain the effect of this program on knowledge and behavior concerning alcohol, the following pilot study was conducted.

Methodology

For evaluation of this program a research design consisting of an experimental and control group with each group tested initially and finally was utilized. (3) To be assured that the testing situation and educational methodologies themselves did not influence responses to the questionnaire, a parallel control group presentation on human sexuality was developed. This presentation included a film and identical values clarification exercises and group facilitator training program using appropriated content.

In September 1975, students in one residence center were asked to volunteer for an educational research program regarding "topics of concern to college students such as drinking and human sexuality." Student residents who indicated an initial interest in the program were divided equally into an experimental and a control group. Both groups were simultaneously administered the *Student Alcohol Questionnaire (SAQ)*. The questionnaire contained 11 demographic items which have been found to be related to alcohol consumption (6, 9, 12, 15) such as sex, religious affiliation, parental drinking patterns, and year in school. There were 36 questions concerning information about alcoholic beverages and popular drinking myths to which the student responded "True," "False" or "Don't Know." Examples of specific questions were: "Alcohol is a drug" and "Drinking coffee or taking a cold shower can be effective ways of sobering up." The 23 behavioral items included such questions as the frequency and amount of alcoholic beverages used during particular time periods, the frequency of having hangovers, or situations involving law enforcement officials and institutional representatives.

After the questionnaire was administered, the 13 minute *Booze and You* film was shown to the experimental group and *About Sex* (17), a 22 minute film on human sexuality was shown to the control group. Students in both groups were then randomly assigned to a small group of ten to thirteen students. Small group discussants in the experimental program received the five alcohol-related values clarification exercises led by a trained facilitator. Small group participants in the control program received five values clarification exercises containing human sexuality content also led by a trained facilitator. After an hour and forty-five minutes of discussion, both groups were administered an alternative form of the alcohol knowledge questionnaire. After a three month period, students in both the experimental and control groups were again administered the SAQ. Due to transfers and attrition 50 students in the experimental group and 33 students in the control group completed all of the research conditions including the three month post test.

Results

To ascertain if the experimental and control groups were similar populations, the demographic and behavior items from each group were compared by chi-square analysis. There were no

significant differences found between the experimental and control groups on any demographic item, their initial alcohol use behaviors, or their knowledge about alcohol.

The various demographic items of the total population of 83 students produced the following profile: 98% were white; 85% were freshmen and sophomore; 59% were from communities over 50 thousand; 60% were from home backgrounds in which their parents drank at least once a year; 89% had religious affiliations which permitted drinking; and 49% were male and 51% were female.

Presented in Table I are the percentages of students who reported various behaviors attributed to drinking at least once during the past year.

Of those students who reported drinking once a month or more, 76% drank beer, 31% drank wine, and 73% drank hard liquor. Of students drinking at least once a week, 46% drank beer, 3% drank wine and 26% drank distilled beverages. "Heavy drinking" is defined by the Research Triangle Institute as consuming five or more drinks at any one time at least once a week. Of the 46% of students who drank beer at least once a week, 37% reported drinking at least five glasses or cans at any one time which would be considered heavy drinking as defined by the Research Triangle Institute. (19)

Of all individuals 86% who drink beer at least once a year, 20% reported that they drank over five cans or glasses and 63% indicated they drank from one to four cans at any one time. Of all students reporting they drink wine at least once a year 69%, 16% consumed five or more glasses and 57% consumed from one to four glasses of wine at any one time. Of students who reported drinking hard liquor at least once a year, 27% drank at least five or more glasses and 75% drank between one and four glasses at any one time. About 6% of all students did not drink beer, 17% did not drink wine, and 6% did not drink hard liquors at all. Only 5% of the students adhered to abstinence of all types of alcoholic beverages.

A t-test (Table II) indicated no significant difference between the pre- test mean scores of knowledge about alcohol as measured by the SAQ between the experimental and control groups. There was, however, a significant difference in mean scores between the experimental and the control groups for the post test administered immediately after the experimental and control treatments ($p < .001$). There was also a significant difference in means between scores for the three month post test ($p < .05$).

A significant difference ($p < .05$) was also found between the initial score for the experimental group or compared to the immediate ($p < .001$) and 3 months post test ($p .05$) (Table III). This analysis indicated that the students in the experimental group had gained significant knowledge about alcohol as measured by the SAQ immediately after the program and had retained this knowledge after a lapse time of three months. Apparently the program was effective in increasing knowledge about alcohol as well as dispelling misinformation concerning popular myths associated with drinking.

Chi-square analyses of each of the 23 drinking related items for the pre- and the three months post-test between and within the experimental and control groups were completed. It was found that there was no significant difference in drinking related behavior patterns for any item on the pre-or post-test either between or within the experimental and control groups (see Table IV for one chi-square analysis. Due to space limitation Chi-square analysis for each of the 23 items will not be reported). Apparently the program had no effect in either increasing or decreasing any of the 23 drinking related behaviors as measured by the SAQ after a time period of three months.

After the experimental treatment, participating students were asked to write anonymously their opinions and feelings about the program. The majority of reactions were most favorable and students found the experience to be not only intellectually and socially acceptable but even enjoyable.

Discussion and Recommendations

These results appear to validate other reports which have suggested that an increase in knowledge does not necessarily change behavior and supports other investigations which appear to indicate that educational methodologies which have been shown to be effective in some situations may not be effective in other situations. (2, 10, 11, 16, 18, 21) Behavior change is a difficult and complex process and is often due to the interrelation of many factors. Variables which may have influenced the results of this study could have been the length. the one time presentation of the program. motivation of the learner. importance of the topic to the learner and the three month time period for the post-test to name a few. However. since the students reported enjoying participating in the program, since it did increase their knowledge of alcohol and apparently did not induce an increase in negative drinking related behaviors, the task force decided to release it for campus use.

It is recommended, however, that if a program just indicates an increase in knowledge but no change in behavior that the presenting group thoroughly discuss its continuation. Of course, it goes without saying that if a program indicates increased problem behaviors it should be discontinued immediately. It is often difficult to discontinue any program even if it does not have the desired effect because time and money have typically been invested. Also there is often a feeling among the presenters of "at least we are trying to do something about the problem." However, if it is decided that a particularly successful program will be continued because of political, social or economic factors, *there should be no delusion that the "problem is now being solved"* and it should be realized that the program will probably only accomplish what the pilot test indicated.

It is recommended that longitudinal studies be carried out using a variety of educational methods at every grade level to determine the effect on behavior change in a variety of areas including substance use and abuse. The teaching of responsible choices and behaviors concerns a variety of life situations needs to be examined as they may influence drinking and other

behaviors. Most importantly, it is recommended that rather than hurriedly developing education programs to meet "crisis situations," that continued, thoroughly evaluated, comprehensive substance use and abuse education be instituted in the schools from kindergarten through adult education.

Summary

Some recent reports have indicated increased drug experimentation following drug-alcohol educational programs. To be assured that a planned campus alcohol awareness program did not create detrimental effects. Thorough evaluation with a small group of students was carried out prior to dissemination on a campus wide basis. The results of this evaluation appear to indicate that this program which included a film, values clarification exercises and discussion significantly increased the students knowledge about alcohol as measured by the *Student Alcohol Questionnaire* but had no effect on reported drinking related behaviors.

References

- 1 Becker, M. H., The Health Belief Model and Personal Health Behavior, Hlth. Ed. Monographs, Winter, 1974.
- 2 Blumenthal, M. The Denver symposium on mass communications research for safety, National Safety Council: Washington, 15-16, 55-68, 1964.
- 3 Campbell, D. T., & Stanley, J. Experimental and quasi-experimental designs for research. NY: Rand McNally, 1970.
- 4 DeHaes, W. and Schuurman, J. Results of an evaluation study of three drug education methods. Int. J. of Hlth. Educ. (sup. to vol 18): 1-16, 1975.
- 5 Engs, R. C. Student alcohol questionnaire. Bloomington, Indiana: 1975.
- 6 Glassco, K. Drinking habits of seniors in a southern university. J. Ale. and D. Educ., 2 (No. 1): 26-29.
- 7 Globetti, G. Approaches to the control of alcoholic beverages in the United States, J. Drug Issues, Tallahassee: 3: 260-266, 1973:
- 8 Halleck, S. The great drug education hoax. The Progressive 30: 18-21, 1970.
- 9 Hanson, D. J. Drinking attitudes and behaviors among college students. J. Ale. and Drug Educ., Spring 1974, 7-13.

- 10 Hochbaum, G. M. How can we teach adolescents about smoking, drinking and drug abuse? J. Hlth Phy Ed. Rec. 3: 2. 1972.
- 11 Hurt, T. and Martin. G. A comparison of three instructional approaches in health education. J. sch. Hlth. 44: 504--507. 1974.
- 12 Jessor, R., Graves. T. D., Hanson. R. C. & Jessor. S. L. Society. personality and deviant behavior: A study of a tri-ethnic community. New York: Holt. Rinehart and Winston, 1968.
- 13 Levin, T. New myths about drug programs. Social Policy (Sep./Oct.): 30-33. 1971.
- 14 Milgram, G. A historical review of alcohol education research and comments. J. Alc. and D. Educ. 2 (No. 2): 1-16, 1976.
- 15 National Institute of Alcoholism & Alcohol Abuse. Alcohol & Health. Second special report for the U.S. Congress. Washington, D. C.: Health. Education and Welfare, 1974.
- 16 Osman. J. The use of selected values clarifying strategies in health education. J. Sch. Hlth.. 4: 21-25. 1974.
- 17 Planned Parenthood. About sex. Texture Films. 1600 Broadway. New York, 1972.
- 18 Reid, J., MacLennan. D. W. Research in instructional television and film. Office of Educ., DHEW: Washington, 1967.
- 19 Research Triangle Institute, a Final report: Center for the study and social behavior, a national study on adolescent drinking behavior. attitudes and correlates. Reprinted by National Clearinghouse for Alcohol Information, Health, Education and Welfare. 1975.
- 20 Sine, R. The comparative effect of a values approach with a factual approach on the drug abuse and smoking behavior of college students. Paper presented Amer. Col. Hlth. Assoc. Annual Convention. Denver. April 1976.